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NAQI, SHARICK				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/559,723

**Applicant(s)**

KAWAMURA ET AL.

**Examiner**

SHARICK NAQI

**Art Unit**

3769

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 March 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7, 9-25, 27, 29 and 30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7, 9-25, 27 and 29-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/06)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Paper No(s)/Mail Date \_\_\_\_\_
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 20, 2009 has been entered.

### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-7 and 9-23 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 1 and 20 positively recite limitations that overlap statutory classes. In this case, the applicant has positively recited **a method and an apparatus** in the same claim. More specifically, “. . . vital data being stored. . .” (page 3, lines 3-4) and “. . . the processing being based. . .” (page 3, line 8) in claim 1, and “. . . information being stored. . .” (page 10, line 18 and page 11, line 5) in claim 20 are method steps written in a system or apparatus type claim. See MPEP 2173.05(p) II. Dependent claims 2-7, 9-19 and 21-23 are rejected as being dependent on a rejected claim.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

**Claims 1-7, 11, 19-25, 27 and 29-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blants et al. US Patent No. 6,231,519 (hereinafter Blants) in view of Kennard et al. US Patent Publication No. 2002/0147613 (hereinafter Kennard).**

In regards to claim 1, Blants discloses a vital data utilization system comprising:  
a server (*Figures 1-3, element 130 Server, column 4, lines 10-67, column 5 lines 1-64*);  
a receiving apparatus (*Figures 1-3, element 130 Server, column 4, lines 10-67, column 5 lines 1-64*); and

a plurality of measurement instruments (*Element 110 or 210*), wherein said server, said receiving apparatus and said measurement instruments are connected via a communication network (*Figures 1-3, column 4, lines 10-67, column 5 lines 1-64*),

wherein each of said measurement instruments includes:

a vital data measurement device that measures vital data of a subject, the vital sign data serving as an indicator of an infection (*Figures 1-3, column 4, lines 10-67, column 5 lines 1-64. PEF Meter measures data indicative of asthmatic reactions and asthmatic reactions result from a variety of factors including infection, see definition of asthma as extrinsic evidence at <http://www.thefreedictionary.com/Asthma>. Thus the PEF data is capable of serving as an indicator of infection*); and

a sending device that sends, to said server, the measured vital data (*Figures 1-3, column 4, lines 10-67, column 5 lines 1-64. Element 110 is a two way mobile data communication tool*),

wherein said server includes:

a receiving device that receives a plurality of vital data including the measured vital data, the plurality of vital data being received from said plurality of measurement instruments (*Figures 1-3, column 4, lines 10-67, column 5 lines 1-64. Server receives data sent over communication network*);

a storage device that stores each of the plurality of received vital data, each of the plurality of vital data being stored in association with **at least one of** (i) measurement position information indicating a position of a respective measurement instrument included in said plurality of measurement instruments (*Figures 1-3, column*

4, lines 10-67, column 5 lines 1-64. GPS location, pulmonary function and time/date data assembled and analyzed at a database 330) and (ii) residence information indicating a position of a respective residence of a subject at which the respective measurement instrument is placed;

a database making device that stores the plurality of vital data into said storage device and makes a database including the plurality of vital data, each of the plurality of vital data being stored in the database in association with at least one of the (i) the measurement position information (*Figures 1-3, column 4, lines 10-67, column 5 lines 1-64. GPS location, pulmonary function and time/date data assembled and analyzed at a database 330)* and (ii) the residence information;

a value-added information making device that processes each of the plurality of vital data stored in the database for the respective subject identified in the database, the processing being based on the **at least one of** (i) the measurement position information and (ii) the residence information, which are associated with each of the plurality of vital data stored in the database and makes, from the plurality of vital data, value-added information indicating, geographical distribution of average values of the plurality of vital data stored in the database (*Figures 1-3, column 4, lines 10-67, column 5 lines 1-64. Data assembled from individual users includes physiological data and location data in the server is analyzed to be representative of any predetermined area. Data is used to create Asthma Cluster Type risk maps showing high risk locations. As explained earlier in the rejection, Asthma reactions are also caused by infections and a dictionary definition of "epidemic" is a widespread occurrence of a disease*

*(www.thefreedictionary.com/epidemic) so the Asthma Cluster Type risk maps showing high occurrence of asthmatic reactions in certain areas is equivalent to value added information indicating geographic distribution of epidemic degrees of infection ); and*

*a value-added information providing device that provides said receiving apparatus with the value-added information (Figures 1-3, column 4, lines 10-67, column 5 lines 1-64. Data assembled and analyzed to be representative of any predetermined area then provided for output to users, public and ecologist), and*

*wherein said receiving apparatus includes*

*an output device that receives the value-added information provided by said value-added information providing device, and presents and outputs the geographical distribution of the average values of the plurality of vital data (Figures 1-3, column 4, lines 10-67, column 5 lines 1-64. Data assembled and analyzed to be representative of any predetermined area then provided for output and presentation to users, public and officials 370, for example via TV or Internet as Asthma Cluster Type risk maps).*

Blants discloses that the data is presented in maps in relation to air quality (column 5, lines 6-60) . Blants does not explicitly disclose the geographic distribution representing the average values using shading such that the shading becomes darker as the average value increase and such that the shading becomes lighter as the average values decrease. However Kennard, a reference in an analogous art, discloses that data related to geographic characteristics including air quality or any other characteristic can be shown on a map by shading (Paragraph 0023). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify

the invention of Blants so the that the data on the Asthma Cluster risk type maps including air quality information are shown on a map by shading as taught by Kennard because Kennard teaches that data related to geographic characteristics including air quality or any other characteristic can be shown on a map by shading (*Paragraph 0023*).

Blants and Kennard do not explicitly disclose that the shading on the map becomes darker as the average value increases and the shading becomes lighter as the average values decreases. However, the Examiner takes Official Notice that using shading on a map to represent data such that the shading becomes darker as the average value increases and lighter as the average value decreases is well known and common knowledge in the art. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Blants and Kennard's map such that the shading becomes darker as the average value increases and lighter as the average value decreases because it is common knowledge in the art.

2. The vital data utilization system according to claim 1,  
wherein each measurement instrument included in said measurement  
instruments further includes  
a clock device that detects a measurement time at which the vital data is  
measured (*Column 4, lines 10-35, column 4, lines 61-67*),



wherein said sending device is sends, to said server, a set of information including the measured vital data and the measurement time (*Column 4, lines 10-35, column 4, lines 61-67*),

wherein said receiving device of said server receives, from said plurality of measurement instruments, a plurality of sets of information (*Figures 1-3, column 4, lines 10-67, column 5 lines 1-64. Server receives data from various user devices*),

wherein said storage device of said server stores the plurality of sets of information, each respective set of information, including respective vital data and a respective measurement time and each respective set of information being stored in association with **at least one of** the (i) the measurement position information and (ii) the residence information, wherein said database making device stores the plurality of sets of received information into said storage device and makes a database including the plurality of received sets of information, each respective set of information being stored in the database in association with **at least one of** the (i) measurement position information and (ii) residence information (*Figures 1-3, column 4, lines 10-67, column 5 lines 1-64. Database assembles and analyzes location data, pulmonary function data and time/date data*), and

said value-added information making device of said server processes the vital data of each set of information stored in the data base for each respective subject identified in the database in association with a respective measurement time and makes, from the vital data stored in the database for each subject identified in the database in association with the respective measurement time, value-added information

indicating, changes over time of geographical distributions of average values indicated by the vital data stored in the database(Figures 1-3, column 4, lines 10-67, column 5 lines 1-64. *Dynamic location, pulmonary function and time/date data received from individual users, assembled and analyzed to be representative of any predetermined area then provided for output to users, public and official as Asthma Cluster Type risk maps* ).

The remaining limitations of claim 2 are rejected based on the same reasoning applied to combine the references in claim 1 above.

3. The vital data utilization system according to claim 1,  
wherein said vital data measurement device quantitatively measures the subjects' vital data (*Column 4, lines 10-35, column 4, lines 61-67*).

4. The vital data utilization system according to claim 1,  
wherein said sending device adds, to respective sets of information, each respective set of information including vital data, respective measurement instrument identification information identifying a corresponding measurement instrument and sends the respective sets of information including the respective measurement identification information to said server (*Figures 1-3, column 4, lines 10-67, column 5 lines 1-64. SMS has ID and so does GPS*),

wherein said storage unit stores the plurality of sets of information, each respective set of information including vital data and respective measurement

instrument identification information and each respective set of information being stored in association with at least one of (i) the measurement position information and (ii) the residence information (*Figures 1-3, column 4, lines 10-67, column 5 lines 1-64.*

*Database assembles and analyzes dynamic location data where GPS and SMS have ID, pulmonary function data and time/date data), and*

wherein said value-added information making device read outs, from said storage device, **at least one of** (i) the measurement position information and (ii) the residence information based on the received measurement instrument identification information received from the server, and processes the respective vital data based on at least one of the read-out information (*Figures 1-3, column 4, lines 10-67, column 5 lines 1-64. Individuals get a warning if they go to an area where the risk level is high for their particular ACT, thus the system analyzes location data and physiological data with relation to a particular user device's identity to send a warning when needed).*

5. The vital data utilization system according to claim 1,

wherein said sending device adds, to respective sets of information, each respective set of information including vital data, **at least one of** (i) the measurement position information and (ii) the residence information, and sends the resulting respective sets of information to said server (*Figures 1-3, column 4, lines 10-67, column 5 lines 1-64), and*

wherein said value-added information making device processes the vital data, of each respective set of information received from said sending device, based on **at least**

**one of** (i) the measurement position information received from said sending device (Figures 1-3, column 4, lines 10-67, column 5 lines 1-64. *Dynamic location, pulmonary function and time/date data received, assembled and analyzed to be representative of any predetermined area then provided for output to users, public and ecologist*) and (ii) the residence information received from said sending device.

6. The vital data utilization system according to claim 1,  
wherein said database making device updates the database each time at least one new set of information including the vital data is received(Figures 1-3, column 4, lines 10-67, column 5 lines 1-64. *Dynamic data collected, thus the database is continuously updated*), and

wherein said value-added information making device updates the value-added information based on the updated database (Figures 1-3, column 4, lines 10-67, column 5 lines 1-64. *Dynamic data collected, thus the database and analysis is continuously updated*).

7. The vital data utilization system according to claim 1,  
wherein said receiving apparatus is placed in at least one of a hospital, a public facility excluding a hospital and a house of a subject (Figures 1-3, column 4, lines 10-67, column 5 lines 1-64. *Mobile device can be carried anywhere, including public buildings*).

11. The vital data utilization system according to claim 1,  
wherein said vital data measurement device is located at housing equipment in a house of a subject (*Figures 1-3, column 4, lines 10-67, column 5 lines 1-64. Mobile device can be carried anywhere*).

19. The vital data utilization system according to claim 1,  
wherein said receiving apparatus is a mobile type apparatus and further includes a present position detection device that detects a present position (*Figures 1-3, column 4, lines 10-67, column 5 lines 1-64. Mobile communication tool 110 has GPS*), and  
wherein said output device receives value-added information indicating a geographical distribution of average values of the vital data of respective subjects located at the detected present position and located at a peripheral part of the detected present position, and presents and outputs the geographical distribution of the average values of the vital data of respective subjects located at the detected present position and located at a peripheral part of the detected present position (*Figures 1-3, column 4, lines 10-67, column 5 lines 1-64. Individuals get a warning if they go to an area where the risk level is high for their particular ACT, thus the system analyzes location data and physiological data with relation to a particular user device's identity to send a warning when needed*).

The remaining limitations of claim 19 are rejected based on the same reasoning applied to combine the references in claim 1 above.

Claims 20-23 are rejected on substantially the same basis as claims 1-6.

Claim 24 is rejected on substantially the same basis as claims 1-6 because the functions of the apparatus described in the rejection of claims 1-6 would reject the method steps of claim 24.

Claim 25 is rejected on substantially the same basis as claims 1-6 because the functions of the apparatus described in the rejection of claims 1-6 would reject the method steps of claim 25.

Claim 27 is rejected on substantially the same basis as claims 1-6.

Claims 29-30 are rejected on substantially the same basis as claims 1-6.

**Claims 1-3, 5-6, 9, 15, 20, 22-23 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iwano et al. US Patent Publication No. 2003/0014283 (Provided in the IDS and hereinafter Iwano) in view of Kennard.**

In regards to claim 1, Iwano discloses a vital data utilization system comprising:  
a server (*Fig. 9, element 203 Server, [0042-0068]*);  
a receiving apparatus(*[0053]*); and

a plurality of measurement instruments, wherein said server, said receiving apparatus and said measurement instruments are connected via a communication network (*Fig. 9, element 201 clients, [0042-0068]*)

each of said measurement instruments includes:

a vital data measurement device that measures vital data of a subject, the vital sign data serving as an indicator of an infection (*Fig 19, [0042-0068]. Client has various sensors to measure physiological data*); and

a sending device that sends, to said server, the measured vital data (*Fig 19, [0042-0068]. Client sends data to sensor, thus it meets the limitation of a sending device*),

wherein said server includes:

a receiving device that receives a plurality of vital data including the measured vital data, the plurality of vital data being received from said plurality of measurement instruments (*[0053-0055, 0059]. Data transferred to server from client, thus the limitation of a receiving device is met*);

a storage device that stores each of the plurality of received vital data, each of the plurality of vital data being stored in association with **at least one of** (i) measurement position information indicating a position of a respective measurement instrument included in said plurality of measurement instruments (*[0053-0055, 0059]. Data transferred to server and stored in a storage device includes location and measurement time data in relation to the vital information data*) and (ii) and (ii)

residence information indicating a position of a respective residence of a subject at which the respective measurement instrument is placed;

a database making device that stores the plurality of vital data into said storage device and makes a database including the plurality of vital data, each of the plurality of vital data being stored in the database in association with at least one of the (i) the measurement position information ([0053-0055, 0059]. *Data transferred to server and stored in a storage device for users to browse is equivalent to creating a database*) and (ii) residence information;

a value-added information making device that processes each of the plurality of vital data stored in the database for the respective subject identified in the database, the processing being based on the **at least one of** (i) the measurement position information and (ii) the residence information, which are associated with each of the plurality of vital data stored in the database and makes, from the plurality of vital data, value-added information indicating, geographical distribution of average values of the plurality of vital data stored in the database ([0053-0059] *data transferred to server is statistically processed and stored in a storage device includes location and measurement time data in relation to the vital information data, thus the limitation of a value-added information making device is met*); and

a value-added information providing device that provides said receiving apparatus with the value-added information ([0053-0060]. *Received data is statistically processed according to various set conditions and provided for a user to browse*) and wherein said receiving apparatus includes



an output device that receives the value-added information provided by said value-added information providing device, and presents and outputs the geographical distribution of the average values of the plurality of vital data ([0053-0060]. *Received data is statistically processed according to various set conditions and displayed/outputted for a user to browse, thus the limitation of an output device is met*).

Iwano discloses that the data contains location information ([0053-0059] *location information is equivalent to geographical data*).

Iwano does not explicitly disclose the geographic distribution representing the average values using shading such that the shading becomes darker as the average value increase and such that the shading becomes lighter as the average values decrease. However Kennard, a reference in an analogous art, discloses that data related to any geographic characteristics can be shown on a map by shading (*Paragraph 0023*). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Iwano so the that the location related data is shown on a map by shading as taught by Kennard because Kennard teaches that data related to any geographic characteristic can be shown on a map by shading (*Paragraph 0023*).

Iwano and Kennard do not explicitly disclose that the shading on the map becomes darker as the average value increases and the shading becomes lighter as the average values decreases. However, the Examiner takes Official Notice that using shading on a map to represent data such that the shading becomes darker as the average value increases and lighter as the average value decreases is well known and

common knowledge in the art. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Iwano and Kennard's map such that the shading becomes darker as the average value increases and lighter as the average value decreases because it is common knowledge in the art.

2. The vital data utilization system according to claim 1,

Wherein each measurement instrument included in said measurement instruments further includes

a clock device that detects a measurement time at which the vital data is measured ([0053]. *Measurement time is part of the data received by server from client, this meets the limitation of a clock device*),

wherein said sending device is sends, to said server, a set of information including the measured vital data and the measurement time ([0055, 0053]. *Measurement time is part of the data received by server from client, in addition to the vital information*),

wherein said receiving device of said server receives, from said plurality of measurement instruments, a plurality of sets of information (*Fig 19, [0042-0068]. Server receives data from numerous clients*),

wherein said storage device of said server stores the plurality of sets of information, each respective set of information, including respective vital data and a respective measurement time and each respective set of information being stored in association with **at least one of** the (i) the measurement position information and (ii) the

residence information, wherein said database making device stores the plurality of sets of received information into said storage device and makes a database including the plurality of received sets of information, each respective set of information being stored in the database in association with **at least one of** the (i) measurement position information and (ii) residence information ([0053-0059]. Vital data in association with location and measurement time is stored in server storage device), and

said value-added information making device of said server processes the vital data of each set of information stored in the data base for each respective subject identified in the database in association with a respective measurement time and makes, from the vital data stored in the database for each subject identified in the database in association with the respective measurement time, value-added information indicating, changes over time of geographical distributions of average values indicated by the vital data stored in the database ([0053-0060]. *Received data is statistically processed according to various set conditions, including region, location and measurement time, and displayed for a user to browse. Data is collected multiple times thus changes over time can be observed by selecting different periods or measurement times*).

The remaining limitations of claim 2 are rejected based on the same reasoning applied to combine the references in claim 1 above.

3. The vital data utilization system according to claim 1,

wherein said vital data measurement device quantitatively measures the subjects' vital data ([0047]).

5. The vital data utilization system according to claim 1,  
wherein said sending device adds, to respective sets of information, each respective set of information including vital data, **at least one of** (i) the measurement position information and (ii) the residence information, and sends the resulting respective sets of information to said server ([0053-0059] *data transferred to server is statistically process and stored in a storage device includes location and measurement time data in relation to the vital information data*), and

wherein said value-added information making device processes the vital data, of each respective set of information received from said sending device, based on **at least one of** (i) the measurement position information received from said sending device ([0053-0060]. *Received data is statistically processed according to various set conditions, including region, location and measurement time*) and (ii) residence information.

6. The vital data utilization system according to claim 1,  
wherein said database making device updates the database each time at least one new set of information including the vital data is received ([0053-0060]. *Data is collected multiple times, thus the data is updated*), and

wherein said value-added information making device updates the value-added information based on the updated database ([0053-0060]. *Received data is statistically processed according to various set conditions, including region, location and measurement time, and displayed for a user to browse. Data is collected multiple times thus updated data can be statistically analyzed by selecting updated/newer periods or measurement times with the region and location*).

9. The vital data utilization system according to claim 1,

wherein the vital data is at least one of body temperature, blood pressure, pulse, cardiograph, oxygen saturation in blood, accelerated pulse wave velocity, a number of white blood cells, C-reactive protein concentration in blood (CRP), protein concentration in urine, glucose concentration in urine, amino acid concentration in urine and feces viscosity (Fig 19, [0048]. *ECG, Blood Pressure, Thermometer*).

15. The vital data utilization system according to claim 1,

wherein said server further includes

a charging device that calculates a charge for value-added information provided to said receiving apparatus ([0062-0068]. *Charging money for browsing the statistical data meets the limitation of a charging device*).

Claims 20 and 22-23 are rejected on substantially the same basis as claims 1-3 and 5-6.

Claim 29 is rejected on substantially the same basis as claims 1-3 and 5-6.

**Claims 9, 10, 11, 13, 14, 16, 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iwano and Kennard as applied to claims 1 and 15 above, and further in view of Ito et al. US Patent No. 6,572,564 (hereinafter Ito).**

In regards to claim 9, Iwano discloses that vital signs measured by the sensors of the client device and transmitted over a network include diabetes patients' glucose levels measured by a blood glucose level meter (*Iwano [0002, 0047, 0058]*). Iwano fails to disclose that the measured vital signs include glucose concentration in urine. However Ito, a reference in an analogous art, discloses urine glucose sensor for collecting glucose data from diabetes patients and transferring them over a network (*Ito Column 9, lines 30-64, column 11, lines 25-32*). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Iwano by substituting the blood glucose level meter of Iwano with Ito's urine glucose sensor because both devices measure glucose/diabetes related patient data for transfer over a network and Ito teaches that the disclosed urine testing device allows any patient to create healthcare measurement data without special technical knowledge (*Ito column 4, lines 49-52*).

In regards to claim 10, Iwano modified by Ito as shown in the rejection of claim 9 above discloses a urine sensor but does not disclose that the sensor measures proteins

like albumin in urine. However, Ito teaches that the biosensors for measuring different items can be exchanged depending upon the disease of the patient and in the case of a patient suffering Renal disease, a biosensor measuring albumin protein is used (*Ito column 9, lines 54-58*). It would have been obvious to one of ordinary skill in the art at the time of the invention to exchange the glucose measuring urine biosensor of Iwano modified by Ito with a biosensor measuring albumin protein in urine if a patient has Renal Disease because Ito teaches exchanging biosensors depending on the disease of the patient from whom data is being collected (*Ito Column 9, lines 54-58*).

In regards to claim 11, Iwano discloses that the client apparatus included the sensor measuring vital signs are connected to the host and server at a hospital over a network from an outside location using a telephone connection (*Iwano [0043-0045, 0095-0097]*). Iwano does not explicitly disclose where the client is located. However Ito, a reference in an analogous art, discloses a system for collecting data from a patient located at home and then transferring it over a network to a Server/Database (*Ito column 1, lines 15-21 and Figure 7*). It would have been obvious to one of ordinary skill in the art at the time of the invention to place the client of Iwano at the patient's home as taught by Ito because the client is connected to the host and server via a network and thus can be located anywhere remote from the server and host located in the hospital, including at home.

In regards to claim 13, Iwano discloses that vital signs measured by the sensors of the client device and transmitted over a network include diabetes patients' glucose levels measured by a blood glucose level meter (*Iwano [0002, 0047, 0058]*). Iwano fails to disclose that the device is located in a toilet apparatus and the device includes a urine analyzer that measures vital data. However Ito discloses a urine glucose sensor in a toilet for collecting glucose data from diabetes patients and transferring them over a network (*Ito Column 3, lines 48-62, column 9, lines 30-64, column 11, lines 25-32*). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Iwano by substituting the blood glucose level meter of Iwano with Ito's urine glucose sensor because both devices measure glucose/diabetes related patient data for transfer over a network and Ito teaches that the disclosed urine testing device allows any patient to create healthcare measurement data without special technical knowledge (*Ito column 4, lines 49-52*).

14. The vital data utilization system according to claim 13,

wherein the urine analyzer mixes urine of the subject and a reagent including an antibody that specifically combines with an analysis target component, measures turbidity of a resulting mixed solution, and measures the analysis target component in the urine (*Ito Column 19, lines 8-62*).

In regards to claim 16, Iwana discloses the apparatus according to claim 15, where subjects provide medical data over a network but does not disclose that said



server further includes an incentive calculation device that calculates an incentive for each subject. However Ito, a reference in an analogous art teaches providing an insurance premium reduction support service (analogous to an incentive calculation device) that provides a patient with a certificate for discounting their insurance (incentive) based on the number of medical measurements the patient provides during a time period that do not show a progression of morbidity (*Ito Column 16, lines 3-15*). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Iwano by adding the insurance premium reduction support service disclosed by Ito because it encourages the user to better manage their disease and provide frequent measurements to the system.

Claims 17 and 18 are rejected on substantially the same basis as claim 16.

**Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Iwano, Kennard and Ito as applied to claim 11 above, and further in view of Reed et al. US Patent No. 6,524,239 (hereinafter Reed).**

In regards to claim 12, Iwano discloses that the measurement device includes a thermometer, a blood pressure meter etc. Iwano also discloses that vital signs measured by the sensors of the client device and transmitted over a network include diabetes patients' glucose levels measured by a blood glucose level meter (*Iwano [0002, 0047, 0058]*). Iwano fails to disclose that the device is located in a toilet apparatus so measurements can be taken when the subject uses the toilet. However

Ito discloses a urine glucose sensor in a toilet for collecting glucose data from diabetes patients and transferring them over a network (*Ito Column 3, lines 48-62, column 9, lines 30-64, column 11, lines 25-32*). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Iwano by substituting the blood glucose level meter of Iwano with Ito's urine glucose sensor located in a toilet because both devices measure glucose/diabetes related patient data for transfer over a network and Ito teaches that the disclosed urine testing device allows any patient to create healthcare measurement data without special technical knowledge (*Ito column 4, lines 49-52*).

Reed, a reference in an analogous art, discloses putting multiple sensors including temperature and pulse sensors into a toilet so measurements can be taken when a subject uses the toilet (*Reed column 5, lines 50-67*). Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to further modify Iwano modified by Ito by placing Iwano's temperature and blood pressure sensors in Ito's toilet with a biosensor as taught by Reed because this allows physiological data to be collected without relying on the subject to remember or actively participate in data acquisition (*Reed Column 2, lines 11-13*).

### ***Response to Arguments***

Applicant's arguments with respect to the pending claims have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SHARICK NAQI whose telephone number is (571)272-3041. The examiner can normally be reached on 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry M. Johnson III can be reached on 571-272-4768. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S. N./  
Examiner, Art Unit 3769

/Michael C. Astorino/  
Primary Examiner, Art Unit 3769

June 8, 2009

